Application No.: 10/586,616

IN THE CLAIMS:

Please amend claims as follows.

1. (original) A reducing mill including a plurality of stands disposed along a rolling direction line, wherein a pipe or tube is rolled through said plurality of stands along said rolling direction line,

said stands each include n rolls, wherein n is equal to or greater than 3, $[(n\geq 3)]]$ disposed around said rolling direction line,

said n rolls are disposed shifted by 180°/n around said rolling direction line from n rolls included in a preceding stand,

[[Each]] <u>each</u> of said n rolls included in each of said plurality of stands excluding a last stand has a groove having an arch shape in cross section,

[[the]] <u>a</u> bottom of said groove having a circular arc shape having a first radius around said rolling direction line in cross section,

[[the]] <u>a</u> distance between [[the]] <u>a</u> surface of a roll flange portion positioned between the bottom and [[the]] <u>an</u> edge of said groove and said rolling direction line is longer than said first radius, and

[[the]] <u>a</u> distance between the edge of said groove and said rolling direction line is longer than the first radius in the groove of a roll included in said preceding stand.

2. (original) The reducing mill according to claim 1, wherein said roll flange portion has an arch shape in cross section.

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3. (original) The reducing mill according to claim 2, wherein in cross section of said groove, a tangent on an end of said bottom matches a tangent on an end of said roll flange portion on the side of said bottom.

- 4. (original) The reducing mill according to claim 3, wherein said roll flange portion has a circular arc shape having a second radius larger than said first radius in cross section.
- 5. (original) The reducing mill according to claim 1, wherein said roll flange portion has a straight shape in cross section.
- 6. (previously presented The reducing mill according to claim 1, wherein n equals 3 and the circular arc of said bottom has a central angle of at least 50°.
- 7. (previously presented) The reducing mill according to claim 1, wherein n equals 4, and the circular arc of said bottom has a central angle of at least 36°.

8-14. canceled